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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/091,903

03/06/2002

Minoru Hato

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06/01/2005

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P O BOX 980

VALLEY FORGE, PA 19482-0980

EXAMINER

NGUYEN, JIMMY H

ART UNIT

PAPER NUMBER

2673

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/091,903

Applicant(s)

HATO ET AL

Examiner

Jimmy H. Nguyen

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is made in response to applicant's amendment filed on 03/02/2005.

Claims 1-7, 9 and 10 are currently pending in the application. An action follows below:

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the feature, "a dielectric layer between the backplate layer and the light-emitting section", lines 13-14 of claim 1, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 3, 4 and 6 are objected to under 37 CFR 1.75(a) because although these claims meet the requirement 112/2d, i.e., the metes and bounds are determinable, however, "the first light-emitting layer", in line 6 of claim 3, in line 14 of claim 4, and in line 13 of claim 6, should be changed to -- a first light-emitting layer --, because there is insufficient antecedent basis for this limitation in the claims. Additionally to claim 6, "Previously Presented" in line 1 must be changed to --Currently Amended" since it is amended.

4. Claims 9 and 10 are objected to under 37 CFR 1.75(a) because although these claims meet the requirement 112/2d, i.e., the metes and bounds are determinable, however, "said switch device includes a movable contact", in lines 1-2 of these claims, must be deleted, because this feature is recited in the independent claims 1 and 4.

It is in the best interest of the patent community that applicant, in his/her normal review and/or rewriting of the claims, to take into consideration these editorial situations and make changes as necessary. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-3 and 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant

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art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding to claims above, the disclosure, when filed, does not fairly convey to one of ordinary skill in the art that applicants had in their possession the claimed subject matter, “a dielectric layer is between the backplate layer and the light-emitting section”, lines 13-14 of claim 1. The original disclosure, specifically fig. 2 and the corresponding description on page 5, lines 17-20, discloses a dielectric layer 19 between the backplate layer 20A/20B and a light emitting layer 18 which is different from the light emitting section 15A/15B. Further, see claims 4 and 6. Accordingly, the original disclosure does not fairly contain the above underlined feature recited in independent claim 1, so as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4-7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howell et al. (USPN: 6,590,508 B1), hereinafter Howell, and further in view of Inubushi et al. (USPN: 5,901,834), hereinafter Inubushi.

As per claims 4, 5 and 10, the claimed invention reads on the Howell reference as follows: Howell discloses a lighting apparatus used for operating electronic devices such as portable computers (see col. 1, lines 5-7, and fig. 1), comprising a lighting unit (see fig. 3)

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including a switch device (a device including elements 34, 42, 48, 52 and a bottom portion of the shaft 40 which is in the aperture 36 or in the idle position, as shown in fig. 3) including a flexible member (a resilient member 42, fig. 3, col. 3, lines 37-38), a pushbutton (a key including elements 29 and a top portion of the shaft 40 which is not in the aperture 36 or is in the idle position, as shown in fig. 3); an EL device (an EL panel 32, see fig. 3, col. 3, lines 21-24) provided to the switch device; and a control circuit (a circuit including an AC power supply as disclosed at col. 5, lines 1-32) coupled to the lighting unit, for controlling light emission from the EL panel (32) to illuminate the pushbutton. As noting in figs. 3 and 8, Howell further teaches the EL device (32) comprising a light emitting section corresponding to the pushbutton and including an optically transparent electrode layer (a transparent front electrode layer 58, fig. 8), a backplate layer (a back electrode layer 68), an optically transparent insulating base (a substrate 56, fig. 8), a first light emitting layer (an EL material layer 64) and a dielectric layer (66). See col. 4, line 31 through col. 5, line 1. Further, as noting at col. 3, lines 50-54, and by virtue of the structure of the lighting apparatus as shown in fig. 3, Howell discloses the switch device including a movable contact (a bottom portion of the shaft 40) and the pushbutton extending through the EL device (32) (or the light emitting section of the EL 32) so that the EL device 32 (or the light emitting section of the EL 32) remains stationary while the pushbutton moves. Accordingly, the Howell reference discloses all the claimed limitations except that the Howell flexible element (42) is not under a bottom of the pushbutton (see fig. 3) and the Howell movable contact (a bottom portion of the shaft 40) is not formed on a lower surface of the flexible member (42) (see fig. 3), as presently claimed.

However, Inubushi discloses a lighting apparatus used for operating electronic devices such as portable telephones (see col. 1, lines 6-8, and fig. 23), comprising a switch device (a device including elements 20, 23 and 25, best seen in fig. 3) which includes a flexible member (25) under a bottom of a pushbutton (a key button 4, see fig. 1) and a movable contact (an upper contact 20, see fig. 3) is formed on the lower surface of the flexible member (25) and faces to a fixed contact (a lower contact 23, see fig. 3). It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to replace the pushbutton, the flexible member, and the movable contact in Howell apparatus with the pushbutton, the flexible member, and the movable contact, of Inubushi, because this would reduce the thickness and the size of the apparatus, as taught by Inubushi (see col. 3, lines 8-12).

As per claims 6 and 7, these claims are similar to claims 4 and 5 except that claims 6 and 7 further recite the lighting unit for illuminating a display device adjacent said pushbutton. Howell further teaches a portable computer system (see fig. 1) comprising a display device (20) adjacent the pushbutton. Howell does not disclose expressly the lighting unit for illuminating the display device or what type of the display device such as a liquid crystal display (LCD) device. Accordingly, Howell in view of Inubushi discloses all the claimed limitations except for the lighting unit for illuminating the display device, as presently claimed. However, Official Notice is taken that the LCD device used in a portable computer system such as a laptop computer to provide a thin and light weighted computer system with a lower power consumption and a backlight device for illuminating the LCD device of the portable computer system to render the image in a low light environment are well known and expected in the art. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to

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replace the Howell display device with the well-known LCD device and to provide a backlight device in the lighting unit of Howell, because this would provide a thin and light weighted apparatus with a lower power consumption and also allow the user to view the apparatus in a low light environment. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to obtain the invention of claims 6 and 7.

Response to Arguments

9. Applicant's arguments, see pages 6-7 of the amendment filed on 3/2/05 with respect to the rejections in the Office Action dated 12/09/2004, have been fully considered and are persuasive in light of the amendments to independent claims 1, 4 and 6. However, upon further consideration, the new grounds of rejections are made above.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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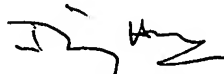
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy H. Nguyen whose telephone number is 571-272-7675.

The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached at 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JHN
May 30, 2005


Jimmy H. Nguyen
Primary Examiner
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